REMARKS

Claims 1-12 are pending in this application. Claims 13-16 have been added.

The Office Action dated January 12, 2004, has been received and carefully reviewed. In that Office Action, claims 1-12 were rejected under 35 U.S.C. 102(b) as being anticipated by Ichikawa. Because it is not believed that Ichikawa shows all elements required by claims 1-12 or new claims 13-16, reconsideration and allowance of these claims is respectfully requested.

Claim 1 requires, a rotational angle detecting apparatus that includes, *inter alia*, converting means for converting a result of an operation of an operating means into electrical angles of detection signals based on a plurality of tables or a plurality of conversion formulas. The tables and conversion formulas represent relationships between electrical angles and detection signals obtained in advance for various gaps between a detector and a target. The Office Action states that Ichikawa shows conversion means as claimed. However, Ichikawa does not show or suggest the use of tables or conversion formulas that take into account different gaps between detection means and a target as claimed.

The MPEP provides at 2182 that "the application of a prior art reference to a means or step plus function limitation requires that the prior art element perform the identical function specified in the claim." There is no suggestion in Ichikawa or in the Office

Action that Ichikawa performs the function recited in claim 1. Instead, the Office Action makes some reference to the structure recited in the specification. The specification would be consulted if an issue of equivalence between a means-plus-function limitation and the teaching of a prior reference became an issue. However, in the present case, the Office Action has failed to identify any structure in Ichikawa that performs the required operation. Therefore, equivalence is not an issue. Unless a reference can be identified that shows a converting means performing the process required by claim 1, it is respectfully submitted that claim 1 is allowable. Claims 2, 3, and 7-9 depend from claim 1 and are submitted to be allowable for the same reasons as claim 1.

Claim 4 requires a rotational angle detector including a controller capable of performing, *inter alia*, a step of storing a plurality of tables representing correlations between operation results and electrical angles for different gaps between detector and a target. Ichikawa in no manner shows or suggests a controller as claimed - there is no suggestion that any element of Ishikawa functions in the required manner. It is therefore submitted that Ishikawa does not anticipate claim 4 and that claim 4 and its dependent claims 5, 6 and 10-12 are allowable over Ishikawa.

Claims 7-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa in combination with Ballantyne. Claims 7-9 depend from claim 1 and claims 10-12 depend from claim 4.

Ballantyne does not address the shortcomings of Ishikawa discussed above in connection with claims 1 and 4. It is therefore submitted that claims 7-12 patentably distinguish over Ishikawa in view of Ballantyne.

New claims 13-15 are also submitted to be allowable over the art of record. Claim 13 requires a method of detecting rotation angles of a rotation member supporting a magnetic target that includes a step of providing either 1) a first table including, for a first gap, correlations between operation results obtained in advance for various positions of the target and electrical angles of the detection signals, and a second table including, for a second gap, correlations between operation results obtained in advance for various positions of the target and electrical angles of the detection signals, or 2) first and second conversion formulas representing the relationship between operation results obtained in advance for various positions of the target and the electrical angle of the detection signals for first and second gaps. No such step is shown or suggested by Ishikawa, and claim 13 and its dependent claims 14 and 15 are submitted to distinguish over Ishikawa for at least this reason.

New claim 16 requires, *inter alia*, a converting circuit for converting an operation result into an electrical angle based on a first table including, for a first gap, correlations between operation results obtained in advance for various positions of the

target and electrical angles of the detection signals, and a second table including, for a second gap, correlations between operation results obtained in advance for various positions of the target and electrical angles of the detection signals or based on first and second conversion formulas representing the relationship between operation results obtained in advance for various positions of the target and the electrical angle of the detection signals for first and second gaps. Such converting circuit is not shown or suggested by the art of record, and claim 16 is thus also submitted to be allowable.

Each issue raised in the Office Action dated January 12, 2005, has been addressed, and it is believed that claims 1-16 are in condition for allowance. Wherefore, reconsideration and allowance of claims 1-16 is earnestly solicited.

Conclusion

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Scott Wakeman (Reg. No. 37,750) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any

overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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